

MARKET RESPONSE OF MERGERS AND ACQUISITIONS' ANNOUNCEMENT AND ITS PREDICTIVE ABILITY IN FORECASTING POST MERGER LONG TERM PERFORMANCE OF THE ACQUIRING COMPANY

Amarjeet Kaur Malhotra, Ansal University

Ajay Kumar Chauhan, Institute of Management Technology, Ghaziabad

ABSTRACT

This paper attempts to analyse the market response of mergers and acquisitions announcement and its ability to forecast the post-merger performance of the acquiring company. The present study is an analytical and exploratory kind of research, where event study approach has been used to analyse market response of mergers and acquisition announcements. The long term performance of the acquiring companies in post-merger period is compared with the type of market response. The study concludes that the market response cannot be considered as the signal of future performance of acquiring company. The market response just indicates that the decision making of investors is not rational and depends upon many behavioral aspects. For the first time, efforts are undertaken to test the rationality of the market responses in predicting the post-merger performance of the acquiring companies.

Keywords: Corporate Restructuring, Financial Engineering, Merger & Acquisitions, Leveraged Buyouts, Strategic Alliances.

INTRODUCTION

Over the last decade or so, there has been frenetic activity within the corporate sector in the area of corporate restructuring. Corporate restructuring refers to change in the ownership, business mix and asset mix alliances with a view to enhance shareholder value. Hence corporate restructuring may involve ownership restructuring, business restructuring and assets restructuring. A company can affect ownership restructuring through merger and acquisition, leveraged buyouts; buy back of shares, spin-off joint ventures and strategic alliances. Business restructuring involves the reorganization of business units or divisions. It includes diversification into new businesses, outsourcing, divestment brand acquisition, etc. Asset restructuring involves the acquisition or sale of assets and their ownership structure. In all forms of restructurings, a central purpose is to better align the interests of managers and shareholders.

Ramachandran (2006) defined the key principle behind a merger or acquisition is to create value over and above that of the sum of the two companies. It is understood that two companies together are more valuable than two separate business entities. Perry and Herd (2004) emphasize the critical role of strategic planning when using M&As to uplift an organization. They suggest that in 1990s, companies shifted the focus for undertaking M&As from a cost saving perspective to using M&As as a strategic vehicle for corporate growth. Jemison and Sitkins (1986) extended justification for acquisitions by concluding that: Particularly for 'core'

acquisitions, to exploit economies of scale or scope, as well as transferring skill (either to the buyer or to the acquired firm) to add value. Fruhan, (1979) also identified various ways to enhance value like: Ability to command premium product prices, achieving reduced or lower than average cost structure, achieving reduced or lower than average capital intensity, ability to obtain debt at lower than normal cost, ability to obtain equity at lower than normal cost, designing more efficient capital structure, acquiring firms via the exchange of an overvalued equity, selling overvalued equity and purchasing undervalued equities.

Now, if we talk from take over perspective, Porter (1987) outlined three necessary tests a firm had to pass to make it an interesting take-over prospect. He called these “the attractiveness test” (which means the industry structure must be or have the potential to be, profitable), the “cost-of-entry test” (which means the cost of entry does not trade off all future profits) and the “betteroff” test (which means the new unit must gain a competitive advantage as a result of the acquisition or the corporation does). All the three tests are important though, but it is the third test that is the most important one. Some kind of advantage must be gained as a result of the acquisition. Porter cites the transfer of skills to the buyer as a major reason for purchasing another firm- he also points out that this can be a one-off transfer, in which case the firm can be divested once all can be learnt has been, or a continuous process, in which case the competitive advantage is increasing.

MERGERS AND ACQUISITION-A RECENT SNAPSHOT IN INDIAN CONTEXT

In India, the mergers and acquisitions scenario changed in mid-2000. As reported by Price Water House Coopers, the value of M&A deals announced in the first six months of 2005 was \$6.9 billion, compared to \$2.9 billion in the first half of 2004 and more than the \$5.2 billion in the whole of 2004. But, corporate India is still counting costs of restructuring, a study done by S. Vaidya Nathan suggests that not even a single company has restructured itself in a way that could rekindle investor interest and improve valuations substantively. Ghosh (2001) concluded in his study that financial success of a merger would be considered based upon the benchmark chosen. Gordon, Roger (2003) provides the theoretical underpinnings for re-examining the interests of shareholders. Rajkumar (2008) in a study of post-merger corporate performance of Indian companies has stated that post-merger operating and financial performance of the acquiring companies show no improvement when compared to pre-merger values.

Indian companies, sensing attractive opportunities outside the country are also venturing abroad. Tata Steel acquiring Dutch steel giant Chorus for US \$12.1 billion, Tata Motors going for Jaguar-Land Rover for US \$2.3 billion and Hindalco acquiring Atlanta based Novelis for 6 billion US dollar are some of the recent examples. Mergers and acquisitions (M&A) in the country slumped to their worst in the first half of 2009 as a liquidity crunch and mismatched valuations marred buying plans of Indian companies. This may be seen from the global slowdown perspective hit in 2008. United States of America (USA) proved to be the most preferred destination for Indian acquirers, with seven of the 31 outbound targets located in that country, followed by the United Kingdom (UK) with three deals. Eight of the 34 inbound deals were acquired by US-based companies, followed by five deals by French firms and four by German firms.

Indian outbound deals, which were valued at US \$0.7 billion in 2000-2001, increased to US \$4.3 billion in 2005, and further crossed US \$15 billion-mark in 2006. In fact, 2006 will be remembered in India's corporate history as a year when Indian companies covered a lot of new grounds. They went shopping across the globe and acquired a number of strategically significant

companies. This comprised 60% of the total mergers and acquisitions (M&A) activity in India in 2006. And almost 99% of acquisitions were made with cash payments.

Acquirer	Target Company	Country Targeted	Deal Value(\$ m1)	Industry
Tata Steel	Corus Group plc	UK	12,000	Steel
Hindalco	Novelis	Canada	5,982	Steel
Tata Motors	Jaguar-Land Rover	UK	2300	Automobile
Videocon	Daewoo Electronics Corp.	Korea	729	Electronics
Dr.Reddy's Labs	Betapharm	Germany	597	Pharmaceutical
Suzlon Energy	Hansen Group	Belgium	565	Energy
HPCL	Kenya Petroleum Refinery Ltd.	Kenya	500	Oil and Gas
Ranbaxy Labs	Terapia SA	Romania	324	Pharmaceutical
Tata Steel	Natsteel	Singapore	293	Steel
Videocon	Thomson SA	France	290	Electronics
VSNL	Teleglobe	Canada	239	Telecom

The rest of the paper is organised as follows. The following section reviews the related literature, Section 3 provides the research objectives, section 4 discusses the methodology and sample selection and section 5 presents the empirical results. Section 6 summarizes and concludes.

LITERATURE REVIEW

Corporate restructuring has enabled thousands of organizations around the world to respond more quickly and effectively to new opportunities and unexpected pressures, thereby re-establishing their competitive advantage. A study done by J. Fred Weston and Samuel C. Weaver in 1994 shows that around 50% mergers are successful in terms of creation of values for shareholders. In an exhaustive study, Agrawal (1992), testing Jensen and Ruback's (1983) findings, determined that the efficient market hypothesis, which suggests that M&A should be profitable for shareholders, remains unresolved, finding that acquiring-firm shareholders actually lost approximately 10% of their market value in the five years post-merger, rather than gaining. Anslinger and Copeland (1996) studied returns to shareholders in unrelated acquisition covering the period from 1985 to 1995 and they found that in two third cases companies were failed to earn their cost of acquisition.

Holthausen (1998) said that various studies have shown that mergers have failure rates of more than 50%. One recent study found that 83% of all mergers fail to create value and half actually destroy value. This is an abysmal record. What is particularly amazing is that in polling the boards of the companies involved in those same mergers, over 80% of the board members thought their acquisitions had created value.

Moeller, Schlingemann and Stulz (2005) analysed a large sample of 12,023 acquisitions and their announcement returns over the period of 1980 to 2001. They found that the average dollar change in wealth of acquiring firm shareholders was negative around the time of announcement. After observing the overall returns, they examine the acquisition performance of smaller firms. They found that smaller firms do more profitable acquisitions while larger

companies do deals that cause their shareholders to lose money. During their sample period small firms earned \$9 billion.

Acquiring firm' shareholders may suffer from overpayment, while target-firm shareholders may benefit in the short term, (Jensen and Ruback 1983; Lajoux and Weston 1998; Rau and Vermaelen 1998). Paul A Pautler (2003) evaluated whether a particular merger enhanced shareholders value vis-à-vis industry benchmark. The paper also studied whether the goals and objectives of the executives were achieved after the merger. The survey focused some large transnational mergers happened during the period 1995-2000. The modus operandi was through a questionnaire responded by some senior executives, involved in the deal. The study also stated that the financial performance post-merger improves in 35-55% of the cases. Deals in post 1995 period had a higher success rate than deals of early 1990s. The paper also discusses the factors and pre-requisites which will most likely result in a more successful merger.

In 1992, Aggarwal, Jaffe and Mandelkar studied post-merger performance of the companies from a different perspective. They adjusted data for size effect and beta weighted market return and found that shareholders of the acquiring firms experienced a wealth loss of about 10% over the period of five years following the merger completion. The study done on 40 Indian companies showed that restructuring through mergers failed to improve the performance of a company, positively. Evidences and several studies suggests that Intense competition, rapid technological change, major corporate accounting scandals and rising stock market volatility have increased the burden on managers to deliver superior performance and value for their shareholders. In the modern "winner takes all" economy, companies that fail to meet this challenge will face the certain loss of their independence, if not extinction.

Thus, A few studies have been conducted in Indian context to judge the market reaction on account of mergers and acquisitions. Indian studies mostly dominated to accounting based study only. The scholars reported positive as well as negative abnormal return in short run period such as (Pandey, 2001; Mishra & Goel, 2005; Malhotra & Zhu, 2006; Anand & Singh, 2008; Kumar & Panneerselvam, 2009; Kashiramka & Rao, 2012; Kumar, Kumar & Deisting 2013, Rani, Yadav & Jain 2013, etc.). But, there is no study available in the existing literature which tried to test the rationality of the market responses in predicting the post-merger performance of the acquiring companies

OBJECTIVES OF THE STUDY

The main objective of the research study is to analyse the predictive ability of the market response of mergers and acquisitions at the time of announcements on the long term performance of acquiring company in post-merger period. The secondary objectives of the research study were as follows:

1. To analyse the post-merger performance of the acquiring companies.
2. To analyse the market response of the investors in predicting long term performance of the acquiring companies in post-merger period.

HYPOTHESIS

H1: There is no significant change in operating performance of the company, post-merger compared to pre-merger performance.

H0: $m1=m2$; $H1=m1 \neq$ (is not equal to) $m2$ i.e., $m1 < m2$ or $m1 > m2$

Where m_1 is the sample mean of pre-merger operating performance of the acquiring and target company and m_2 is the sample mean of post-merger operating performance

H₂: The market response of the investors is a significant signal for the long term performance of the acquiring companies in post-merger period

RESEARCH METHODOLOGY

The study carried out in this project is an Analytical and Exploratory kind of research in which an attempt has been made to explore as much information as possible about the impact of corporate restructuring on the selected organizations. This is a company specific research work rather than an industry specific. All deals that fulfil certain conditions have been included in the study. The final sample consists of 12 Indian companies. For the purpose of this study the stock exchange announcement of the merger has been taken as event date (Day zero). In order to conduct an event study daily adjusted closing price of data of all selected companies has been used as proxy for market return and the data has been collected from proweess database. The daily stock returns has been calculated as follows: $R_i = P_{i,t} / P_{i,t-1} - 1$.

Short-Term Event Study

Fama et al (1969) is the first to use event study methodology for calculating the abnormal return. Abnormal return is crucial to judge the impact of an event as it isolates the effect of the event from other general market movement. A substantial feature of the event study is the choice of appropriate normal market model, Brown and Warner (1985) indicate that the market model is the standard for evaluating returns around the announcement and provides good results. Abnormal return is the difference between actual returns and expected returns, expected returns is calculated by using market model: $AR_i = R_{i,t} - E(R_{i,t})$, $E(R_{i,t}) = \alpha_i + \beta_i RM_{t,T}$. AR_i : is the abnormal return $R_{i,t}$: is the actual return, $E(R_{i,t})$ is the expected return in absence of the event. α and β coefficient is calculated by OLS over a window period of (-120,-21). RM : is the Market return by using market index by observing at the time of t during the event window. Then the cumulative abnormal return is $CAR_{i,1,T_2} = \sum_{t=T_1}^{T_2} AR_{i,t}$. The CAAR for the event window is calculated $(T_1, T_2) = \frac{1}{N} \sum_{i=1}^N CAR_{i,1,T_2}$.

The analysis of abnormal return over several windows captures the information regarding the market reactions to the mergers announcement effect before the announcement date (effects of insider trading or rumours), at the event date (merger effect) and the post-announcement period (temporary pressure on prices and probable post-announcement correction).

Sample Plan

This research sample unit comprises following Indian companies, which had followed the practice of corporate restructuring after undergoing merger and acquisition.

1. Tata Steel–Chorus
2. Hindalco Industries–Novelis
3. Dr Reddy–Betapharm
4. ONGC–Imperial Energy
5. Suzlon Energy–Repower Systems
6. VSNL–Teleglobe
7. Tata Chemicals–General Chemicals Industrial Products Inc.

8. United Spirits–Whyte and Mackay
9. Mahindra and Mahindra–Ssangyong
10. Tata motors–Jaguar and land rover
11. Tata coffee–Eight O Clock
12. Videocon and Thomson SA

Sample Size

Sample size comprises above-mentioned 12 Indian companies. These companies are selected because ample financial information is available for last three years before corporate structuring was done.

Data Collection

The data for this study is collected from CMIE Prowess Database. Secondary data is collected from the websites of different companies, Annual General Reports of companies, Journals and magazines of different corporate houses apart from SEBI's website. CMIE Prowess will also be referred to and 3 years Operational efficiency will be compared for the pre and post-merger period for each of the sample companies for the following financial areas.

1. Profitability Ratios
2. Liquidity and Solvency Ratios
3. Management efficiency ratios

DATA ANALYSIS AND INTERPRETATION

This section describes the results and interpretation of the data analysis done in the research study. Event Study Approach is used to analyse the market response of the investors to the merger and acquisitions announcements. The strategic objectives of the various mergers and acquisitions are identified and finally the long term performance of the acquirer company is analysed and compared with the prediction of the market at the time of announcement.

Event Study approach is based on the fundamental idea that changes in the stock prices represent the discounted value of the firm's future stream of profits. Hence, when observing a stock market reaction to the announcement of a particular event (e.g. a merger), the change in the equity value of a firm affected by this event can then be taken as a measure of the (discounted) additional profits that they are expected to accrue as a consequence of the event.

Hindalco–Novelis Merger

Hindalco entered into an agreement to acquire the Canadian company Novelis for an all cash deal of US \$6 billion which would make the combined entity the world's largest rolled-aluminum producer. Novelis at the time of acquisition was the world's largest producer of rolled aluminum and recycler of aluminum cans. The acquisition was completed on 15 May 2007. This bid in 2007 was the largest Indian investment in North America and the second-largest overseas investment after Tata Steel Europe's purchase of Corus two weeks earlier. The stocks fell by 13% reducing the market cap by US \$600 million. The shareholders criticised the deal for the premium paid to acquire Novelis.

Acquiring Company	Acquired Company	Announcement Date	Event date	CAR	CAAR	Remark
Hindalco	Novelis	9 th Feb 2007	15 th May 2007	-7.354	-0.141	Negative Response

As shown in Table 2, it is found that the market response to this merger is negative. This is due to the perception among the investors that Hindalco paid huge premium to Novelis, which may affect the future profitability of the Hindalco and its financial performance may come down in future. Following table shows the post-merger performance of Hindalco:

Year	Post-Merger performance of Hindalco				
	2008	2009	2010	2011	2012
PAT	2,623.80	348.83	4,351.85	2879	3558
EPS	21.38	2.05	22.74	12.59	17.42
Average Stock Price	178.2	69.25	154.18	192	112

Ex-Post analysis is done by checking the profitability of the acquiring company on an annual basis after the acquisition is completed. The analysis of the same is shown in Table 3. Here the acquisition was completed on 15th May 2007. Hence, above table gives the PAT and EPS of Hindalco for 5 years from 2007 onwards. CAAR shows that market has negative perception. The profitability does not have a clear trend as it depends more on the commodity prices. As the profitability does not show a clear trend we can say that we fail to reject event study approach analysis for this case.

Dr Reddy–Betapharm

Dr. Reddy's and 3i, Europe's leading private equity house together announced that they have entered into an agreement providing for the strategic investment by Dr. Reddy's to acquire 100% of Betapharm Group, for a total enterprise value of €480 million in cash. Betapharm Group is the fourth-largest generic pharmaceuticals company in Germany.

Acquiring Company	Acquired Company	Announcement Date	Event date	CAR	CAAR	Remark
Dr Reddy	Betapharm	16 th Feb 2006	4 th March 2006	19.531	0.375	Positive Response

As shown in the results it is found that market response to this merger is positive for this case.

Table 5 shows the post-merger performance of Dr Reddy. Ex-Post analysis is done by checking the profitability of the acquiring company on an annual basis after the acquisition is completed. Here the acquisition was completed on 4th March 2006. Hence, above table gives the PAT and EPS of Dr Reddy for 5 years from 2006 onwards. CAAR shows that market has positive perception. In terms of profitability over a period of 5 years the company has improved on returns provided. Based on the correlation CAAR between the profitability we can say that event study approach analysis passes for this case.

	Post-Merger Performance of Dr Reddy				
Year	2007	2008	2009	2010	2011
PAT	965.53	437.3	-917	351	998
EPS	56.88	25.41	0	18.95	57.21
Average Stock Price	644.61	543.6	405.8	1181	1537

ONGC and Imperial Energy

On August 26th, 2008 ONGC made announcement of acquiring Imperial Energy (UK). The deal was finally completed on 3rd September, 2009. ONGC acquired 100% stake in Imperial Energy. The total value of the deal was \$2.58 billion. It was ONGC's biggest overseas acquisition till date.

Acquiring Company	Acquired Company	Announcement Date	Event date	CAR	CAAR	Remark
ONGC	Imperial Energy	26 th Aug 2008	3 th Sep 2009	-14.335	-0.281	Negative Response

Below Table 7 gives the PAT and EPS of ONGC for 5 years from 2009. Also table shows the monthly average return for 1-5 years after the deal was completed.

	Post-Merger Performance of ONGC				
Year	2009	2010	2011	2012	2013
PAT	16,126.32	16,767.56	18,924.00	25,122.92	20,925.70
EPS	75.40	78.39	22.12	29.36	24.46
Average Returns	0.00298677	0.004755061	0.000340648	0.001911149	0.025074687

Since the CAR and CAAR values are negative, we had expected that the profitability of the company and the average returns to decline. But, for this company we cannot conclude whether the profitability or the average returns have declined. This is because other events have affected the market sentiments of the company. ONGC has acquired a lot of company between the duration of 2008 and 2012. Hence, for this model to be successful, we would have to analyse the impact of each of those acquisitions before coming to any sort of conclusion. Also, ONGC in November 2012 has announced of acquiring ConocoPhillips in Kazakhstan for \$5 billion—its biggest acquisition till date. Such an event has also affected the price of the shares in after the date of announcement.

With respect to Imperial Energy, ONGC regretted the decision of acquiring this company in 2011-2012. There were a few reasons for the same, some of which are mentioned below:

1. The oil prices declined rapidly in 2011-2012
2. The oil fields on which ONGC acquired Imperial Energy were estimated to produce 80000 barrels per day (BPD). This was later revised to 45000 BPD. Currently it produces 15000 BPD.

3. ONGC ran into trouble with the Government of UK over poor operational results, unpaid salaries, legal confrontations with staff and outsourcing of valuable contracts to foreign companies resulting in a warning that future projects in UK involving ONGC depended on better results from this current project.
4. New investment aimed at boosting production has not materialised causing production levels to drop below targets.

So just considering the ONGC and Imperial Energy acquisition, we can say that the market sentiment was right regarding this deal as CAR and CAAR were negative. But, in order to fully justify this model we need to take into consideration other events as well. Hence, in this case we can say that the model does not give a clear picture about the performance of the company.

Suzlon Energy and Repower Systems

Suzlon Energy on 9th February 2007 announced its intention to take over Repower Systems in Germany for \$1.6 billion. The deal was finally completed on 15th December, 2008 as shown in Table 8.

Acquiring Company	Acquired Company	Announcement Date	Event date	CAR	CAAR	Remark
Suzlon Energy	Repower Systems	9 th Feb 2007	15 th Dec 2008	-2.567	-0.0503	Negative Response

Post-Merger Performance of Suzlon Energy					
Year	2008	2009	2010	2011	2012
PAT	1,416.88	-469.27	-1,414.09	-185.66	-505.38
EPS	9.47	-3.13	-9.08	-1.04	-2.84
Average Returns	0.021758447	0.004909457	0.002734645	-0.012391677	-0.002497234

Above Table 9 gives the PAT and EPS of Suzlon for 5 years from 2008. From the above tables, we expect the profitability and the average returns to be negative as CAR and CAAR is negative and we are not disappointed. The profitability of the company, PAT and EPS, has declined on a continuous basis. The monthly average returns also have declined continuously. Hence, for this acquisition, we can safely say that the model has correctly predicted the market sentiments.

Tata-Corus Acquisition

On October 20, 2006 the board of directors of Anglo-Dutch steelmaker Corus accepted a \$7.6 billion takeover bid from Tata Steel, the Indian steel company, at 455 pence per share of Corus. The following months saw a lot of negotiations from both sides of the deal. Tata Steel's bid to acquire Corus Group was challenged by CSN, the Brazilian steel maker. Finally, on January 30, 2007, Tata Steel purchased a 100% stake in the Corus Group at 608 pence per share in an all cash deal, cumulatively valued at US \$12.04 billion. The deal is the largest Indian takeover of a foreign company and made Tata Steel the world's fifth-largest steel group.

Table 10						
TATA-CORUS ACQUISITION						
Acquiring Company	Acquired Company	Announcement Date	Event date	CAR	CAAR	Remark
Tata	Corus	20 th Oct 2006	30 th Jan 2007	-16.6603	-0.3332	Negative Response

Table 11					
POST ACQUISITION EFFECT IN TATA-CORUS ACQUISITION					
Post-Merger Performance of Tata					
Year	2008	2009	2010	2011	2012
PAT	12,321.76	4,849.24	-2,120.84	8,856.05	4,948.52
EPS	168.51	64.94	-24.44	92.39	50.95
Average daily Return	-0.0103	-0.0078	-0.0039	-0.0031	0.0134

The analysis in above Table 11 shows that the returns were negative for at least four years before they became positive in the fifth year. Also, they are constantly increasing year after year. Hence, we can say that the effect of acquisition is present for the duration of five years, but with reduced strength every subsequent year. Therefore, the calculated negative CAAR correlates successfully with the wealth creation of Tata Steel. The analysis above shows that both PAT and EPS were decreasing for at least four years apart from one odd case in 2011 where the production of steel in Europe picked speed at that time. Because of that, the values went up. Anyways, we can still say that the calculated negative CAAR correlates successfully with the profitability of Tata Steel. Therefore, the calculated negative CAAR correlates successfully with both the wealth creation and the profitability of Tata Steel.

VSNL-Teleglobe Acquisition

Table 12						
VSNL - TELEGLOBE ACQUISITION						
Acquiring Company	Acquired Company	Announcement Date	Event date	CAR	CAAR	Remark
VSNL	Teleglobe	25 th July 2005	13 th Feb 2006	-28.9201	-0.5784	Negative Response

Table 13					
POST ACQUISITION EFFECT IN VSNL-TELEGLOBE ACQUISITION					
Post-Merger Performance of VSNL					
Year	2007	2008	2009	2010	2011
PAT	468.56	304.46	515.95	483.18	162.56
EPS	16.44	10.68	18.1	16.95	5.7
Average daily Return	-0.0123	0.0005	-0.0062	-0.0124	-0.0049

Videsh Sanchar Nigam Limited, (VSNL), the leading provider of international communication solutions, announced on February 13, 2006 the completion of its acquisition of Teleglobe International Holdings Ltd. Earlier it announced on July 25, 2005 that it was acquiring Teleglobe International Holdings, a provider of wholesale voice, data, internet protocol and mobile signaling services in a US \$239 million deal. The acquisition value included the price of \$4.5 per share payable to shareholders of Teleglobe and the assumed debt. The acquisition was to be carried out through the amalgamation of Teleglobe with the company's subsidiary in Bermuda. It was subject to the approval of Teleglobe's shareholders and government approvals in various countries.

The analysis of the above Tables 12 & 13 shows that the returns were negative for at least four years with an exception in 2008. This was due to the fact that since the company was globally launched as Tata Communications in 2008, the stocks of the company went up immediately and thus the positive returns. Therefore, we can say that the calculated negative CAAR correlates successfully with the wealth creation of VSNL. The analysis above shows that both PAT and EPS were decreasing for at least four years apart from one odd case in 2009 where the due to global launch of the company as Tata Communications, the values went up. Anyways, we can still say that the calculated negative CAAR correlates successfully with the profitability of VSNL. Therefore, the calculated negative CAAR correlates successfully with both the wealth creation and the profitability of VSNL.

TATA Chemical Acquisition of General Chemicals Industrial Products Inc.

On 31st January 2008, Tata Chemicals Limited (TCL), part of the TATA group, has entered into definitive agreements to acquire the Soda Ash business of General Chemical Industrial Products Inc. (GCIP), a US based chemical company, for US \$1 billion. To fund the acquisition, Tata Chemicals has raised \$850 million comprising a \$500 million seven-year loan at 1.35 percentage points over LIBOR and a \$350 million in six-month bridge loan

Acquiring Company	Acquired Company	Announcement Date	Event date	CAR	CAAR	Remark
Tata Chemical	General Chemical Industrial Products Ltd.	31 th Jan 2008	27 th Mar 2008	10.8648	0.1841	Positive Response

Table 15 shows that the positive expectation of market as found out by CAAR was not in line with the actual results as Tata Chemicals profits declined for consecutive 3 years since the acquisition was done. Thus the expectation of the market does not turn out to be true.

Post-Merger Performance of Tata Chemical					
Year	2008	2009	2010	2011	2012
PAT	949.18	452.05	434.78	408.49	586.6
EPS	40.56	19.22	17.87	16.03	23.03
Average daily Return	0.010071	0.006720	0.000645	-0.001918	-0.000347

United Spirits Acquisition of Whyte & Mackay

Acquiring Company	Acquired Company	Announcement Date	Event date	CAR	CAAR	Remark
United Spirits	Whyte & Mackay	14 th Jan 2007	16 th May 2007	-4.65707	-0.09132	Negative Response

On 14th January 2007, United Spirits Ltd, a part of the Vijay Malaya's UB Group, entered into definitive agreements to acquire the major Scottish Alcoholic Beverages Company Whyte & Mackey in an all cash deal for 595 Million Euros

Post-Merger Performance of United Spirits					
Year	2008	2009	2010	2011	2012
PAT	311.28	296.66	376.02	385.47	342.79
EPS	31.06	29.62	29.94	29.47	26.21
Average daily Return	0.00136	0.00844	-0.00279	0.00104	-0.01484

Table 17 shows that the negative expectation of market as found out by CAAR was not in line with the actual results as United Spirits Ltd profits have improved for consecutive 3 years since the acquisition was done. Thus the expectation of the market does not turn out to be true.

M&M Acquisition of Ssangyong

On 23rd Aug 2010, Mahindra announced to buy a major stack in Korean automobile company. So we have considered the 500 days before the announcement for formulating the regression model predicting the stock returns of Mahindra, taking market returns as an independent variable. The market used for the study is CNX Auto (consisting major players in auto sector).

Acquiring Company	Acquired Company	Announcement Date	Event date	CAR	CAAR	Remark
M&M	Ssangyong	23 rd Aug 2010	15 th Mar 2011	12.8530	0.2472	Positive Response

The positive expectation of market could be realized as depicted in Tables 18 & 19. The returns based on PAT, EPS and average daily return are in line with market expectations as shown in Table 19.

Post-Merger Performance of M&M			
Year	2011	2012	2013
PAT	2662.10	2878.89	3352.82
EPS	45.33	48.88	56.80
Average daily Return	0.0027	0.0014	0.0015

TATA Motor's Acquisition of Jaguar and Land rover

On 26th Mar 2008, Ford Motor Company announced that they have entered in a deal with Tata Motors to sell Jaguar and Land rover. So we have considered the 500 days before the announcement for formulating the regression model predicting the stock returns of TATA

Motors, taking market returns as an independent variable. The market used for the study is CNX Auto (consisting major players in auto sector).

Acquiring Company	Acquired Company	Announcement Date	Event date	CAR	CAAR	Remark
Tata Motors	Jaguar and Land Rover	26 th Mar 2008	2 nd June 2008	-18.9853	-0.3651	Negative Response

Year	Post-Merger Performance of Tata Motors				
	2009	2010	2011	2012	2013
PAT	1013.76	2829.54	1811.82	1242.23	301.81
EPS	22.70	42.37	30.28	3.90	0.93
Average daily Return	-0.003164	0.01217	0.002933	-0.007607	0.002291

As per Table 21, the data of PAT and average daily returns do not show any trend. The EPS data is in sync with the proposition of the study. Overall nothing can be concluded from the data. We are failed to reject the proposition.

Tata Coffee Acquisition of Eight O' Clock, USA

This acquisition transformed Tata Coffee from a regional player to global player and helped established a global footprint in retail segment. The deal was announced on 25th June 2006 and was completed by 31st July 2006. The deal value was \$220 million and was a pure cash deal financed by mainly equity and partly by non-recourse debt.

Acquiring Company	Acquired Company	Announcement Date	Event date	CAR	CAAR	Remark
Tata Coffee	Eight O' Clock	25 th June 2006	31 st July 2006	-13.4350	-0.2742	Negative Response

Year	Post-Merger Performance of Tata Coffee				
	2007	2008	2009	2010	2011
PAT (Rs. Cr.)	20.23	24.68	18.64	31.99	55.08
EPS (Rs.)	9.73	12.02	8.96	15.88	27.84
Average daily Return	-0.002254	-0.001350	0.02222	0.003586	-0.005809

To check whether this trend (of -ve daily returns) holds true in future, daily returns for 1-month period (after a year of deal completion) were calculated for next 5 years as shown in Table 23. The average daily returns for next 5 years for the same 1-month period (of August) are negative for first 2 years and then gets positive but declines in next year and becomes positive again in 5th year. We calculate the PAT & EPS for subsequent 5 years after deal completion to check the impact of deal on shareholder wealth creation. The increasing trend in PAT & EPS contradicts the effect of negative CAAR. Thus, based on mixed pattern of average daily returns

and increasing PAT/EPS, we can say that Event Study approach is not able to predict future financial performance of the company.

Videocon Acquisition of Thomson SA, France

On 29th June 2005, Videocon acquired French giant, Thomson SA's Colour Picture Tube (CPT) business in a debt free deal of € 240 million. It was an almost cash less deal with Thomson investing back € 225 million in Videocon Industries' oil & gas business and € 15 million in Videocon International. The deal was intended to provide Videocon with backward integration and manufacturing ability in low-cost countries like Poland, Mexico, China & Italy.

Table 24
VIDEOCON ACQUISITION OF THOMSON SA, FRANCE

Acquiring Company	Acquired Company	Announcement Date	Event date	CAR	CAAR	Remark
Videocon	Thomson SA	25 th June 2006	29 th June 2005	-27.8379	-0.5681	Negative Response

Table 25
POST ACQUISITION EFFECT IN CASE OF VIDEOCON-THOMSON SA, FRANCE

Post-Merger Performance of Videocon					
Year	2006	2007	2008	2009	2010
PAT (Rs. Cr.)	818.5	855.22	854.3	400.66	744.69
EPS (Rs.)	36.4	37.9	36.9	16.93	19.45
Average daily Return	-0.003131	-0.000231	-0.02699	-0.006263	-0.003247

Table 26
OVERALL RESULTS OF EVENT STUDY ANALYSIS

Company	+ve CAR	+ve Profitability	-ve CAR	-ve Profitability	Theory (Pass/Fail)
Hindalco			Yes	No trend	Fail to Reject
Dr Reddy	Yes	Yes			Pass
ONGC			Yes	No trend	Fail to Reject
Suzlon			Yes	Yes	Pass
M&M	Yes	Yes			Pass
TATA Motors			Yes	No trend	Fail to reject
TATA Chem	Yes			Yes	Fails
United Spirits		Yes	Yes		Fails
Tata Coffee			Yes	No	Fails
Videocon			Yes	Yes	Pass
Tata Steel			Yes	Yes	Pass
VSNL			Yes	Yes	Pass
Event Study Result	Pass		Fail	Couldn't Reject	
No of Companies	6		3	3	

To check whether this trend (of -ve daily returns) holds true in future, daily returns for 1-month period (after a year of deal completion) were calculated for next 5 years as shown in Table 25. The average daily returns for 1-month period (of October) for subsequent 5 years are mostly consistent with negative CAAR. To check the deal impact on shareholders' wealth creation, we check the PAT & EPS values for subsequent 5 years after deal completion. The near flat and then decreasing PAT/EPS confirms the financial performance predicted by negative CAAR. Thus Event Study approach is able to predict the future performance of the company with good correlation.

CONCLUSION

The overall results show that such a theory is not perfectly accurate for long term. With little higher number of examples when the theory succeeded in predicting the long term future of the M&A, compared to the theory failing, we can say that the event study approach cannot be very surely applied to the predict the long term effect of any M&A on the company's performance. The study concludes that the market response cannot be considered as the signal of future performance of acquiring company. The market response just indicates that the decision making of investors is not rational and depends upon many behavioral aspects. For the first time, efforts are undertaken to test the rationality of the market responses in predicting the post-merger performance of the acquiring companies by using event study approach. In this study, only twelve mergers were studied, the same approach may be used in future studies for a bigger data base for more reliable results.

REFERENCES

- Binder, J. (1998). The event study methodology since 1969. *Review of Quantitative Finance and Accounting*, 11(2), 111-137.
- Chakrabati, R. (2008). Do Indian acquisitions create value? *ICRA Bulletin, Money and Finance*, 4(1) 61-73.
- Corrado C.J. (1969). A nonparametric test for abnormal security price performance in event studies. *Journal of Financial Economics*, 23(2), 385-395.
- Cybo O.A. & Murgia, M. (2000). Mergers and shareholder wealth in European banking. *Journal of Banking & Finance*, 24(6), 831-859.
- DePamphilis, D. (2014). *Mergers, acquisitions, and other restructuring activities (Fifth Edition)*. Elsevier.
- Franks, J., Harris, R. & Titman, S. (1991). The post-merger share-price performance of acquiring firms. *Journal of Financial Economics*, 29(1), 81-96.
- Holthausen, R.W. & Larcker, D.F. (1998). The financial performance of reverse leveraged buyouts. *Journal of Financial Economics*, 47(1), 123-123.
- Houston, J.F., James, C.M. & Ryngaert, M.D. (2001). Where do merger gains come from? Bank mergers from the perspective of insiders and outsiders. *Journal of Financial Economics*, 60(2), 285-331.
- Jemison, D.B. & Sitkin, S.B. (1986). Corporate acquisitions: A process perspective. *The Academy of Management Review*, 11(1), 145-163
- Jensen, M.C. & Ruback, R.S. (1983). The market for corporate control: The scientific evidence. *Journal of Financial Economics*, 11, 5-50.
- Kashiramka, S. & Rao, N.M. (2013). Shareholders wealth effects of mergers & acquisitions in different deal activity periods in India. *European Journal of Business and Management*, 5(4), 116-129.
- Kumar, B.R. & Panneerselvam, S. (2009). Mergers, acquisitions and wealth creation: a comparative study in the Indian context. *IIMB Management Review*, 21(3), 222-224.
- Malhotra, S. & Zhu, P. (2006). *Shareholder Benefits and Firm Performance: an Empirical Analysis of International Acquisitions by Firms from a Developing Economy*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=934968.
- Mishra, A. & Goel, R. (2005). Return to shareholders from mergers: The case of RIL and RPL merger. *IIMB Management Review*, 17(3), 31-45.
- Moelle, S.B., Schlingemann, F.P. & Stulz, R.M. (2005). Wealth destruction on a massive scale? A study of acquiring-firm returns in the recent merger wave. *The Journal of Finance*, 60(2), 757-782.
- Mohan, T.R. (2005). Bank consolidation: Issues and evidence. *Economic and political weekly*, 40(12), 1151-1161.
- Pandey, A. (2001). Takeover announcements, open offers and shareholders' returns in target firms. *Vikalpa*, 26(3), 19-30.
- Perry, J.S. & Herd, T.J. (2004). Merger & acquisitions: Reducing M & A risk through improved due diligence, *Strategy and Leadership*, 32(2), 12-19.
- Ramachandran, S. (2006). *Merger & acquisitions: Your Survival Kit*. Retrieved from <http://www.rediff.com/getahead/2006/aug/10merg.htm>.

- Rani, N. (2012). Impact of merger and acquisitions on returns to shareholders of acquiring firms: Indian economy in perspective. *Journal of Financial Management and Analysis*, 1-24.
- Rani, N., Yadav, S.S. & Jain, P.K. (2013). Market response to the announcement of mergers and acquisitions: An empirical study from India vision. *The Journal of Business Perspective*, 17(1), 1-16.
- Singh, M.A. (2008). Impact of merger announcement on shareholder's wealth: Evidence from Indian private sector banks. *Vikalpa*, 33(1), 35-53.